

**MARINE PROTECTION, RESEARCH AND SANCTUARIES ACT § 102
OCEAN DUMPING PERMIT**

PERMIT NUMBER AND TYPE: OD98-01 Special

EFFECTIVE DATE: March 1, 1998

EXPIRATION DATE: February 28, 2001

PERMITTEE: StarKist Samoa, Inc.
P.O. Box 368
Pago Pago, American Samoa 96799

WASTE GENERATOR: StarKist Samoa, Inc.
P.O. Box 368
Pago Pago, American Samoa 96799

WASTE GENERATED AT: StarKist Samoa, Inc.
P.O. Box 368
Pago Pago, American Samoa 96799

PORT OF DEPARTURE: Pago Pago Harbor, American Samoa

WASTE TRANSPORTER: FV TASMAN SEA
Blue North Fisheries, Inc.
1130 N.W. 45th Street
Seattle, Washington 98107-4626

A special ocean dumping permit is being issued to StarKist Samoa, Inc. The Regional Administrator of EPA Region IX has determined that disposal of fish processing wastes off American Samoa meets EPA's ocean dumping criteria at 40 C.F.R. Parts 227 and 228. For this permit, the term "fish processing wastes" shall refer to Dissolved Air Flotation (DAF) Sludge, Cooker Juice and Press Liquor generated at the permittee's plant in Pago Pago, American Samoa; or any combination of the three waste streams pumped from StarKist Samoa's onshore holding tanks into the ocean disposal vessel for transportation to the ocean disposal site.

This special permit authorizes the transportation and dumping into ocean waters of fish processing wastes as described in the special conditions section pursuant to the Marine Protection, Research, and Sanctuaries Act (MPRSA) of 1972 (33 U.S.C. § 1401 *et seq.*) as amended (hereinafter referred to as "the Act"); regulations issued thereunder; and the terms and conditions stated below.

This MPRSA Special Permit does not contain any information collection requirements subject to Office of Management and Budget review under the Paper Work Reduction Act of 1980 (44 U.S.C. § 3501 *et seq.*). This determination has been made because the permit does not require data collection by more than 10 persons.

1. GENERAL CONDITIONS

- 1.1. Operation under this special ocean dumping permit shall conform to all applicable federal statutes and regulations including, but not limited to, the Act, the Marine Plastic Pollution Research and Control Act of 1987 (P.L. 100-220), the Clean Water Act (33 U.S.C. § 1251 *et seq.*), and the Ports and Waterways Safety Act (33 U.S.C. § 1221 *et seq.*).
- 1.2. All transportation and dumping authorized herein shall be undertaken in a manner consistent with the terms and conditions of this permit. StarKist Samoa, Inc. (hereafter referred to as "the permittee") shall be liable for compliance with all such terms and conditions. The permittee shall be held liable under § 105 of the Act (33 U.S.C. § 1415) if any permit violations occur. During disposal operations when the permittee's fish processing wastes are loaded aboard the disposal vessel in holding tanks, either separately or combined with similar fish processing wastes from other permittees authorized to use the ocean disposal site defined in Special Condition 2.2, the permittees shall be held individually liable under § 105 of the Act (33 U.S.C. § 1415) if a permit violation occurs. If a permit violation occurs during the transportation and disposal of fish processing wastes, the waste transporter may also be liable for permit violations.
- 1.3. Under § 105 of the Act, any person who violates any provision of the Act, 40 C.F.R. Parts 220 through 228 promulgated thereunder, or any term or condition of this permit shall be liable for a civil penalty of not more than \$50,000 per day for each violation. Additionally, any knowing violation of the Act, 40 C.F.R. Parts 220 through 228, or the permit may result in a criminal action being brought with penalties of not more than \$50,000 or one year in prison, or both. Violations of the Act or the terms and conditions of this permit include but are not limited to:
 - 1.3.1. Transportation to, and dumping at any location other than that defined in Special Condition 2.2 of this permit;
 - 1.3.2. Transportation and dumping of any material not identified in this permit, more frequently than authorized in this permit, or more than the quantities identified in this permit, unless specifically authorized by a written modification hereto;
 - 1.3.3. Failure to conduct permit monitoring as required in Special Conditions 3.1, 3.3.1, 4.7 and 5.1; or
 - 1.3.4. Failure to file reports on fish processing wastes and disposal site monitoring reports as required in the Special Conditions.

- 1.4. Nothing contained herein shall be deemed to authorize, in any way, the transportation from the United States for the purpose of dumping into the ocean waters, the territorial sea, or the contiguous zone, the following materials:
 - 1.4.1. High-level radioactive wastes;
 - 1.4.2. Materials, in whatever form, produced for radiological, chemical, or biological warfare;
 - 1.4.3. Persistent synthetic or natural materials which may float or remain in suspension in the ocean; or
 - 1.4.4. Medical wastes as defined in § 3(k) of the Act.
 - 1.4.5. Flotables, garbage, domestic trash, waste chemicals, solid waste, or any materials prohibited by the Act or the Marine Plastic Pollution Research and Control Act.
- 1.5. Nothing contained herein shall be deemed to authorize, in any way, violation of applicable American Samoa Water Quality Standards. The following water quality standards apply:

Table 1. 1989 American Samoa Water Quality Standards: Oceanic Waters [§24.0207(g)(1-7)].

| Parameter | Median Not to Exceed the Given Value |
|-------------------------|---|
| Turbidity | 0.20 NTU |
| Total Phosphorus | 11.0 µg-P/L |
| Total Nitrogen | 115.0 µg-N/L |
| Chlorophyll <i>a</i> | 0.18 µg/L |
| Light Penetration Depth | 150 feet, to exceed the given value 50% of the time. |
| Dissolved Oxygen | Not less than 80% of saturation or less than 5.5 mg/L. If the natural level of dissolved oxygen is less than 5.5 mg/L, then the natural dissolved oxygen level shall become the standard. |
| pH | The pH range shall be 6.5 to 8.6 pH units and within 0.2 pH units of the level which occurs naturally. |

Should the American Samoa Water Quality Standards applicable to this permit be revised, such revised standards shall apply to this permit.

- 1.6. After notice and opportunity for a hearing, this permit may be revised, revoked or limited, in whole or in part, subject only to the provisions of 40 C.F.R. §§ 222.3(b) through 222.3(h) and 40 C.F.R. § 223.2, as a result of a determination by the Regional Administrator of EPA that:
 - 1.6.1. The cumulative impact of the permittee's dumping activities or the aggregate impact of all dumping activities in the dump site designated in Special Condition 2.2 should be categorized as Impact Category I, as defined in 40 C.F.R. § 228.10(c)(1);
 - 1.6.2. There has been a change in circumstances regarding the management of the disposal site designated in Special Condition 2.2;
 - 1.6.3. The dumping authorized by the permit would violate applicable American Samoa Water Quality Standards;
 - 1.6.4. The dumping authorized can no longer be carried out consistent with the criteria defined at 40 C.F.R. Parts 227 and 228;
 - 1.6.5. The permittee violated any term or condition of the permit;
 - 1.6.6. The permittee misrepresented, or did not accurately disclose all relevant facts in the permit application or monitoring reports; or
 - 1.6.7. The permittee did not keep records, engage in monitoring and reporting activities, or to notify appropriate officials in a timely manner of the transportation and dumping activities as specified in any condition of this permit.
- 1.7. The permittee shall ensure always that facilities, including any vessels associated with the permit, are in good working order to achieve compliance with the terms and conditions of this permit. During all loading operations, there shall not be a loss of fish processing wastes to any waterway. During transport to the disposal site, there shall not be a loss of fish processing wastes to Pago Pago Harbor or the ocean.
- 1.8. The permittee shall notify the Regional Administrator or his delegate in writing of any change in the designated fish processing waste transporter at least 30 days before the transfer date. Written approval by the EPA Regional Administrator must be obtained before such a transfer occurs.

- 1.9. The permittee shall allow the EPA Regional Administrator, the Commander of the Fourteenth U.S. Coast Guard District (USCG), the Director of the American Samoa Environmental Protection Agency (ASEPA), and/or their authorized representatives to:
 - 1.9.1. Enter into, upon, or through the permittee's premises, vessels, or other premises or vessels under the control of the permittee, where, or in which, a source of material to be dumped is located or in which any records are required to be kept under the terms and conditions of this permit or the Act;
 - 1.9.2. Have access to and copy any records required to be kept under the terms and conditions of this permit or the Act;
 - 1.9.3. Inspect any dumping equipment, navigational system equipment, monitoring equipment or monitoring methods required in this permit;
 - 1.9.4. Sample or require that a sample be drawn, under EPA, USCG, or ASEPA supervision, of any materials discharged or to be discharged; or
 - 1.9.5. Inspect laboratory facilities, data, and quality control records required for compliance with any condition of this permit.
- 1.10. If material which is regulated by this permit is disposed of, due to an emergency, such as to safeguard life at sea, in locations or in a manner that does not comply with the terms of this permit, the permittee shall make a full report, according to the provisions of 18 U.S.C. § 1001, within 15 days to the EPA Regional Administrator, the USCG and the ASEPA describing the conditions of this emergency and the actions taken, including the location, the nature and the amount of material disposed.
- 1.11. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of rights, nor any infringement of Federal, State or local laws or regulations, nor does it obviate the necessity of obtaining State or local assent required by applicable law for the activity authorized.
- 1.12. This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities, or, except as authorized by this permit, the conduct of any work in any navigable waters.
- 1.13. Unless otherwise provided for herein, all terms used in this permit shall have the meanings assigned to them by the Act or 40 C.F.R. Parts 220 through 228, issued thereunder.

2. SPECIAL CONDITIONS - DISPOSAL SITE AND FISH PROCESSING WASTE CHARACTERIZATION

Special conditions are necessary to define the length of the permit period, identify the disposal site location, describe fish processing waste streams and define maximum permitted limits for the combined three waste streams (DAF sludge, cooker juice and press liquor) stored in on-shore storage tanks.

2.1. Location of the Waste Generator and Duration of the Permit

2.1.1. The material to be dumped shall consist of fish processing wastes, defined in Special Conditions 2.3 and 2.4, generated at the permittee's fish cannery in Pago Pago, American Samoa.

2.1.2. This permit shall become effective on March 1, 1998 and it shall expire three years from the effective date at midnight on February 28, 2001.

2.2. Location of Disposal Site

Disposal of fish processing wastes generated at the location defined in Special Condition 2.1.1 shall be confined to a circular area with a 1.5 nautical mile radius, centered at 14° 24.00' South latitude by 170° 38.30' West longitude.

2.3. Description of Fish Processing Wastes

2.3.1. During the term of this permit, and according to all other terms and conditions of this permit, the permittee is authorized to transport and dispose a combined waste stream total maximum of 200,000 gallons per day of fish processing wastes. The fish processing wastes-- Dissolve Air Flotation (DAF) sludge, cooker juice and press liquor/water-- are combined and stored in the permittee's onshore storage tanks prior to transport to the ocean disposal site.

2.4. Fish Processing Waste Stream Limits

Fish processing waste stream limits apply to the combined fish wastes of DAF sludge, cooker juice and press liquor/water, which are combined and stored in an onshore storage tank prior to transport to the ocean disposal site (see Table 3 - following page).

Table 3. Limits for Onshore Storage Tank Fish Wastes

| Physical or Chemical Parameter (units)^a | Storage Tank |
|---|---------------------|
| Total Solids (mg/L) | 101,800 |
| Total Volatile Solids (mg/L) | 84,100 |
| 5-Day BOD (mg/L) | 129,390 |
| Oil and Grease (mg/L) | 62,940 |
| Total Phosphorus (mg/L) | 1,750 |
| Total Nitrogen (mg/L) | 10,980 |
| Ammonia (mg/L) | 11,810 |
| pH (pH units) | 6.2 to 7.1 |
| Density (g/mL) | 0.97 to 1.03 |

a = All calculated values were rounded to the nearest 10, except density and pH ranges.

- 2.4.2. Permitted Maximum Concentrations for the onshore storage tank fish waste were calculated based on an analysis of data over a 4-year period from the permittee's previous Special Ocean Dumping Permit, number OD 93-01. The calculations followed EPA's recommended procedure for determining permit limits as defined in the EPA document titled: "Guidance Document for Ocean Dumping Permit Writers" (January 30, 1988). EPA Region IX will periodically review these limits during the permit to evaluate the accuracy of the limits. If revisions are necessary, EPA Region IX will make changes according to the authority defined in the Ocean Dumping Regulations at 40 C.F.R. §§ 223.2 through 223.5.
- 2.4.3. The Permitted Maximum Concentrations, density range and pH range listed above, shall not be exceeded at any time during the term of this permit.

3. SPECIAL CONDITIONS - ANALYSIS OF FISH PROCESSING WASTES

Compliance with the permitted maximum concentrations defined in Special Condition 2.4 shall be determined by monthly monitoring of the waste in the onshore storage tank. **The sampling dates shall be scheduled within the first two weeks of the month to allow enough time for laboratory analyses and report writing to comply with Special Condition 3.3.**

3.1. Analyses of Fish Processing Wastes

3.1.1. Concentrations or values of the parameters listed in Special Condition 2.4 and those listed in the table below shall be determined for the waste in the onshore storage tank. Once a month, the permittee shall analyze samples taken from its onshore fish processing waste storage tank during the transfer of these wastes to the disposal vessel's holding tanks.

3.1.1.1. Three samples shall be taken from the onshore storage tank transfer line at 10 minute intervals. These samples shall be composited to produce one sample for analysis. The permittee's samples shall not be combined with fish processing waste from any other permittee.

3.1.1.2. The parameters and detection limits listed in Table 4 shall be analyzed and used for the onshore storage tank composite samples.

Table 4. Physical and Chemical Parameters and Associated Method Detection Limits for Analyses of Onshore Storage Tank Waste

| Parameter | Method Detection Limit |
|-----------------------|------------------------|
| Total Solids | 10.0 mg/L |
| Total Volatile Solids | 10.0 mg/L |
| 5-Day BOD | 10.0 mg/L |
| Oil and Grease | 10.0 mg/L |
| Total Phosphorus | 1.0 mg/L |
| Total Nitrogen | 1.0 mg/L |
| Ammonia | 1.0 mg/L |
| pH | 0.1 pH units |
| Density | 0.01 g/mL |

3.1.2. All sampling procedures, analytical protocols, and quality control/quality assurance procedures shall be performed according to guidelines specified by EPA Region IX. The following references shall be used by the permittee:

- 3.1.2.1. 40 C.F.R. Part 136, EPA Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act;
- 3.1.2.2. Tetra Tech, Incorporated. 1985. Summary of U.S. EPA-approved Methods, Standard Methods and Other Guidance for 301(h) Monitoring Variables. Final program document prepared for the Marine Operations Division, Office of Marine and Estuarine Protection, U.S. Environmental Protection Agency. EPA Contract No. 68-01-693. Tetra Tech, Incorporated, Bellevue, WA.; and
- 3.1.2.3. Environmental Protection Agency. 1987. Quality Assurance and Quality Control for 301(h) Monitoring Programs: Guidance on Field and Laboratory Methods. Office of Marine and Estuarine Protection, Washington, D.C. EPA 430/9-86-004.

3.2. Analytical Laboratory

- 3.2.1. Within 30 days of the effective date of this permit, the name and address of the contract laboratory or laboratories and a description of all analytical test procedures and quality assurance/quality control procedures, including detection limits being used, shall be provided to EPA Region IX.
- 3.2.2. Any potential variation or change in the designated laboratory or analytical procedures shall be reported, in writing, for EPA Region IX approval.
- 3.2.3. EPA Region IX may require analyses of quality control samples by any laboratories employed to comply with Special Condition 3.1 and Appendix A. Upon request, the permittee shall provide EPA Region IX with the analytical results from such samples.
- 3.2.4. Should there be a modification in the permittee's fish processing procedures such that there may be a significant change in the quality of a fish processing waste stream (DAF sludge, cooker juice or press liquor) EPA Region IX and ASEPA shall be notified 60 days prior to such modification. At their discretion, either agency may require that the permittee conduct a complete analysis of parameters for specified waste streams, and report the results to EPA Region IX and ASEPA within 30 days of sampling. (A sample shall consist of three replicate grab samples pooled for use as a composite sample. The detection limits specified in Table 4 shall be used in all fish processing waste stream analyses.) If necessary, bioassays may be required in addition to parameter analyses.

3.3. Reporting

- 3.3.1. The permittee shall provide EPA Region IX, ASEPA, the National Marine Fisheries Service (NMFS), the U.S. Fish and Wildlife Service (USFWS) and the Western Pacific Regional Fishery Management Council (WPRFMC) with a report, prepared every 3 months during the permit period, that contains the following information:
- 3.3.1.1. Daily volume of fish processing waste (total combined waste streams of DAF Sludge, Cooker Juice and Press Liquor) generated at the permittee's facility and pumped into the permittee's onshore storage tanks to be reported in gallons per day using Form 1 (see Appendix B);
 - 3.3.1.2. Daily volume of fish processing waste disposed at the ocean disposal site to be reported in gallons per day using Form 1 (see Appendix B);
 - 3.3.1.3. Monthly fish processing waste analyses from the onshore storage tank demonstrating that the fish processing wastes being dumped comply with the permitted limits of parameters listed in Special Condition 2.4 and a cumulative yearly summary of the volumes of fish processing wastes disposed at the ocean site using Form 2 (see Appendix B);
 - 3.3.1.4. The monthly amount of alum (aluminum sulfate) and coagulant polymer added to the fish processing waste streams reported in pounds per month (see Forms 1 and 2).
- 3.3.2. Such reports, including a comparison with the permit limits as required on Forms 1 and 2, shall be submitted to EPA Region IX, ASEPA, NMFS USFWS and WPRFMC within 45 days of the end of the preceding 3-month period for which they were prepared. The reports shall be submitted within this time unless extenuating circumstances are communicated to EPA Region IX and the ASEPA in writing. In addition to a hard copy of Forms 1 and 2, the data contained on Form 1 shall be submitted to EPA Region IX on a 3.5" computer diskette in a LOTUS spreadsheet format (i.e., wk1), including name of cannery, permit number, and months for which the data is submitted.
- 3.3.3. A summary report of all 3-month reports listed in Special Condition 3.3.1, including a comparisons with permit limits and a detailed discussion of the summary results, shall be submitted by the permittee to EPA and the ASEPA 60 days after the permit expires. Delay or non-compliance with this requirement will (respectively) delay or preclude renewal of the permit. All fish processing waste data shall be reported in the same format as required in Special Condition 3.3.2.

- 3.3.4. Upon detection of a violation of any permit condition, the permittee shall send a written notification of this violation to EPA Region IX and the ASEPA within five working days and a detailed written report of the violation shall be sent to the agencies within 15 working days. This notification shall pertain to any permit limits (defined in Special Condition 2.4) that are exceeded, violation of volume limits (defined in Table 2 under Special Condition 2.3.1), and any disposal operation that occurs outside the disposal site defined in Special Condition 2.2.
- 3.3.5. Twenty-four months from the effective date of this special permit, the permittee shall submit a report to EPA and ASEPA on the results of confirmatory suspended phase acute toxicity bioassay tests and dilution model calculations (i.e., Limiting Permissible Concentration) of the predicted concentrations of fish processing wastes disposed at the designated site. The suspended phase bioassays shall be conducted using at least one species from each of the following three groups: Group 1 = *Mytilus* sp. (mussel), *Crassostrea* sp. (oyster), *Acartia tonsa* (copepod), or *Trypneustes* sp. (sea urchin) larvae; Group 2 = *Holmesimysis costata* (mysid shrimp) or *Penaeus vannamei* (white shrimp); and Group 3 = *Citharichthys stigmatæus* (speckled sanddab) or *Coryphaena hippurus* (dolphinfish) juveniles.

Appropriate suspended phase bioassay protocols, either protocols approved by EPA or protocols published by the American Society for Testing and Materials (ASTM), shall be followed. Suspended particulate phase bioassays shall be run using the following fish processing waste concentrations: 100%, 75%, 50%, 25%, 10%, 5%, and a control (0%). A minimum of five replicates are required per dilution concentration. Concurrent reference toxicant tests shall be conducted when the suspended phase bioassays are run.

A sampling and testing plan shall be submitted to EPA Region IX and ASEPA for approval before the bioassay tests are conducted. Samples for the suspended particulate phase bioassays shall be composited from the permittee's onshore storage tanks. Three samples shall be taken from the onshore storage tank transfer line at 10 minute intervals. These samples shall be composited to produce one sample for analysis. The permittee's samples shall not be combined with fish processing waste from any other permittee. Samples shall be collected and shipped to the testing laboratory according to EPA-approved methods to ensure that the samples do not change before the bioassay tests begin. All suspended particulate phase bioassays shall be started within 10 days of sampling.

If changes in processing and /or disposal operations should occur, an additional re-evaluation of the disposal model may also be required. These evaluations (bioassays and/or modeling) would be used to confirm the toxicity of the fish processing wastes and to evaluate the disposal operations based on the use of a different disposal vessel or different mode of disposal.

The confirmatory bioassay report shall contain the following information:

3.3.5.1. INTRODUCTION AND PROJECT DESCRIPTION

The project description should include the following information about fish processing waste toxicity, previous bioassay test results, and the design of the new bioassay tests. If modeling analysis is necessary, then previous modeling at the ocean disposal site should also be included.

3.3.5.2. MATERIALS AND METHODS

Fish processing waste sampling and sample handling procedures should be described or referenced.

References for laboratory protocols for suspended phase bioassay tests.

- 1) EPA-approved methods and references.
- 2) Test species used in each test, the supplier or collection site for each test species, and QA/QC procedures for maintaining the test species.
- 3) Source of seawater used in reference, control and bioassay tests.
- 4) Data and statistical analysis procedures.
- 5) Limiting Permissible Concentration (LPC) calculations.
- 6) If modeling analysis is required as stipulated in Special Condition 3.3.5., description of model selected to evaluate dispersal of fish processing wastes at the ocean disposal site. Use of this model shall be approved by EPA Region IX and ASEPA before it is used by the permittee to evaluate the fish processing waste disposal plume.

3.3.5.3. DESCRIPTION OF SAMPLING PROCEDURES

QA/QC procedures and actual sampling procedures used during fish processing waste stream sampling and handling of the samples.

3.3.5.4. FINAL RESULTS, ANALYSIS OF DATA AND DISCUSSION

- 1) Complete bioassay data tables and summary bioassay tables shall be furnished in the report. All data tables should be typed or produced as a computer printout.
- 2) The permittee shall analyze the bioassay data and calculate the LPC of the material as defined at 40 C.F.R. § 227.27(a-b).
- 3) The permittee shall use the LPC in the approved plume model to determine the concentration of fish processing wastes disposed at the designated ocean disposal site which complies with EPA's Ocean Dumping Criteria defined at 40 C.F.R. Parts 227 and 228.

3.3.5.5. REFERENCES

This list should include all references used in the field sampling program, laboratory protocols, LPC calculations, modeling analyses, and historical data used to evaluate the fish processing waste disposal operations at the designated ocean disposal site.

3.3.5.6. DETAILED QA/QC PLANS AND INFORMATION

The following topics should be addressed in the QA Plan:

- 1) QA objectives.
- 2) Organization, responsibilities and personnel qualifications, internal quality control checks.
- 3) Sampling and analytical procedures.
- 4) Equipment calibration and maintenance.
- 5) Sample custody and tracking.
- 6) documentation, data reduction, and reporting.
- 7) Data validation.
- 8) Performance and systems audits.
- 9) Corrective action.
- 10) Reports.

4. SPECIAL CONDITIONS - VESSEL OPERATIONS

Specifications for vessel operations are defined to limit dumping activities to the dump site identified in Special Condition 2.2 and to record all dumping activities. The permittee's fish processing wastes and fish processing wastes of other authorized permittees may be loaded into the disposal vessel together or separately.

4.1. Posting of the Permit

This permit, or a true copy thereof, shall be placed in a conspicuous place on any vessel which is used for the transportation and dumping authorized by this permit.

4.2. Vessel Identification

Every vessel engaged in the transportation of fish processing wastes for ocean disposal shall have its name and number painted in letters and numbers at least fourteen (14) inches high on both sides of the vessel. The name and number shall be kept distinctly legible always, and a vessel without such markings shall not be used to transport or dump fish processing wastes.

4.3. Determination of the Disposal Location Within the Dump Site

On each disposal trip, the master of the disposal vessel shall determine the location of the disposal operation as follows:

- 4.3.1. The disposal vessel, as defined under WASTE TRANSPORTER on page 1 of this permit, shall proceed directly to the center of the disposal site at the location specified in Special Condition 2.2.
- 4.3.2. The master of the vessel shall observe the conditions at the dump site center, noting the vessel's position (latitude and longitude), wind direction and observed surface current direction.
- 4.3.3. After the conditions defined in Special Condition 4.3.2 have been recorded, the master of the disposal vessel shall proceed 1.1 nautical miles up current from the center of the disposal site and record the position of the disposal vessel (latitude and longitude). This position shall be the starting point for disposal operations for each disposal trip.
- 4.3.4. The master of the disposal vessel shall prepare a hard copy (i.e., on 8.5 inch by 11 inch paper) of the computerized navigational plot documenting compliance with the procedures defined in Special Conditions 4.3.1 through 4.3.4. The hard copy of the computerized navigational plot for each disposal trip shall be supplied to the permittee. The permittee shall submit these hard copies of the computerized navigational plots with the 3-month reports required under Special Condition 3.3.1. The hard copies of the navigational plots shall include:

- 4.3.4.1. The disposal vessel's course during the entire dumping operation; and
- 4.3.4.2. The times and location of entry and exit from the disposal site, position and time of arrival at the center of the disposal site, position and time of arrival at the location 1.1 nautical miles up current from the disposal site, beginning and ending position and time of dumping operations, and disposal vessel position plotted every 15 minutes while dumping operations occur.
- 4.3.5. The master of the disposal vessel shall sign and date each hard copy of the computerized navigational plots certifying that the hard copies are an accurate record of the disposal vessel's track for each disposal trip.
- 4.3.6. The master of the disposal vessel shall certify that disposal operations occurred in the manner required by the permit.
- 4.3.7. The procedures listed in Special Conditions 4.3.1 through 4.3.6 shall be repeated for each disposal trip.

4.4. Disposal Rate and Vessel Speed

- 4.4.1. The disposal vessel/barge shall discharge the material authorized by this permit beginning at the disposal location as determined by Special Condition 4.3.3. The vessel track shall be in a direction that is perpendicular to the current detected at the center of the disposal site as defined in Special Condition 2.2. Disposal shall occur in a target area defined by an oval shape track along an axis at least 0.5 nautical miles on either side of the starting point determined in Special Condition 4.3.3. The entire disposal vessel track shall be within the disposal site boundaries.
- 4.4.2. Deviations from normal disposal operations (as described in Section 4.4.1) must be reported within 30 days of the date of occurrence. If such deviation should occur, the master of the disposal vessel shall describe the adverse conditions in the log and submit a record of the disposal trip, including the computer-generated navigational plot. Minor deviations in the vessel's track due to adverse ocean conditions (e.g. large waves, strong winds, etc.) are allowed as long as disposal operations occur in the prescribed target area thereby allowing the fish waste to disperse within the disposal site boundaries. If adverse sea state conditions prevent ocean disposal operations in this manner, then all operations shall cease until sea state conditions are compatible with the required disposal operations.
- 4.4.1.3. From June 1 through November 30, fish processing wastes shall be pumped from the disposal vessel into the ocean at a rate of 140 gallons per minute per knot, not to exceed 1,400 gallons per minute at a maximum speed of 10 knots.

- 4.4.1.4. From December 1 through May 31, fish processing wastes shall be pumped from the disposal vessel into the ocean at a rate of 120 gallons per minute per knot, not to exceed 1,200 gallons per minute at a maximum speed of 10 knots.

4.5. Computerized Navigational System

The permittee shall use an onboard computerized electronic positioning system to fix the position of the disposal vessel accurately during all dumping operations. The computerized navigational system and the method to produce a 8.5 inch by 11 inch hard copy of each disposal operation must be approved by EPA Region IX and the USCG Liaison Office (CGLO) Pago Pago. The permittee shall submit the description, specifications and example hard copy plots for the computerized navigational system before the date of the first disposal operations under this permit. Disposal operations shall not begin until EPA Region IX and CGLO Pago Pago provide the permittee with written approval for the computerized navigation system and the hard copy plots.

4.6. Permitted Times for Disposal Operations

Dumping operations shall be restricted to daylight hours, unless an emergency exists as defined at 40 C.F.R. § 220.1(c)(4). ASEPA and CGLO Pago Pago shall be notified immediately if an emergency exists and ocean disposal is required to protect human life at sea. No later than 5 working days after the emergency, the permittee and the waste transporter shall provide EPA Region IX, ASEPA and CGLO Pago Pago with a detailed written report on the emergency situation.

4.7. Reporting of the Ocean Dumping Vessel Operations

- 4.7.1. The waste transporter shall maintain and the permittee shall submit copies of a daily transportation and dumping log, including hard copy plots of all information required in Special Conditions 4.3 and 4.7.2. Copies of the daily logs shall be sent to EPA Region IX, CGLO Pago Pago, and the ASEPA as part of the 3-month report.
- 4.7.2. The logbook shall contain the following information for each disposal trip:
 - 4.7.2.1. Permit number, date and unique consecutive trip number;
 - 4.7.2.2. Record of contact with ASEPA and CGLO before each trip to the ocean disposal site;
 - 4.7.2.3. The time when loading of the vessel commences and ceases in Pago Pago Harbor;
 - 4.7.2.4. The volume of fish processing waste loaded into the disposal vessel from each fish cannery;

- 4.7.2.5. The time and navigational position that dumping commences and ceases;
- 4.7.2.6. A record of vessel speed and direction every 15 minutes during each dumping operation at the disposal site, and a hard copy of the vessel's course defined in Special Condition 4.3;
- 4.7.2.7. Discharge rate from the disposal vessel.
- 4.7.2.8. Observe, note and plot the time and position of any floatable material;
- 4.7.2.9. Observe, note and plot the wind speed and direction every 30 minutes while dumping fish processing wastes at the designated disposal site;
- 4.7.2.10. Observe and note current direction at the beginning and end of the disposal trip, and the direction of the disposal plume at the end of the disposal operation;
- 4.7.2.11. Observe, note and plot the presence of any visible (previous) disposal plume and any unusual occurrences during the disposal trip, or any other information relevant to the assessment of environmental impacts as a result of dumping activities; and
- 4.7.2.12. Any unusual occurrences noted under Special Condition 4.7.2.9 shall be highlighted in the report defined in Special Condition 3.3.1.
- 4.7.2.13. Any deviation from the normal disposal pattern such as circumstances described in Special Condition 4.4.2 and reasons for the deviation.

5. SPECIAL CONDITIONS - DUMP SITE MONITORING

The monitoring program for disposal of fish processing wastes in the ocean must document effects of disposed wastes on the receiving waters, biota, and beneficial uses of the receiving waters; compliance with EPA's Ocean Dumping Regulations; and compliance with permit terms and conditions. Revisions to the monitoring program may be made under the direction of EPA Region IX at any time during the permit term, in compliance with 40 C.F.R. §§ 223.2 and 223.3. This may include a change in the number of parameters to be monitored, the frequency of monitoring, the location of sample stations, or the number and size of samples to be collected.

Implementation of the disposal site monitoring program and all segments of the monitoring program specified in Special Condition 5 and Appendix A shall be the responsibility of the permittee.

5.1. Monitoring Program

The permittee shall conduct the monitoring program, defined in Appendix A, to determine the environmental impacts of ocean dumping of fish processing waste. If possible, monitoring cruises shall be scheduled within the first two weeks of each month to allow enough time for laboratory analysis and report writing in compliance with Special Condition 5.2. The permittee shall notify the ASEPA at least 48 hours before any scheduled monitoring activities.

5.2. Monitoring Reports

Monthly site monitoring reports shall be submitted to EPA Region IX, the ASEPA, NMFS, USFWS and WPRFMC with the 3-month reports as specified in Special Condition 3.3.2. The reports shall include: neatly compiled raw data for all sample analyses, and quality assurance/quality control data. An annual report shall include: an annual compilation of data, statistical analysis of sample variability between stations and within samples for each parameter, and a detailed discussion of the results.

5.3. Final Summary Report

5.3.1. A report shall be submitted to EPA Region IX, ASEPA, NMFS, USFWS and WPRFMC 60 days after the permit expires. This report shall summarize all of the data collected to characterize fish processing wastes and the results of the dump site monitoring program specified in this special permit.

5.3.2. At a minimum, the summary report shall contain the following sections:

5.3.2.1. Introduction (including a summary of previous ocean disposal activities),

5.3.2.2. Location of Sampling Sites,

- 5.3.2.3. Materials and Methods,
- 5.3.2.4. Results and Discussion (including comparisons and contrasts with previous MPRSA § 102 research and special permit data related to disposal of fish processing wastes off American Samoa),
- 5.3.2.5. Conclusions; and
- 5.3.2.6. References.

5.4. Quality Assurance/Quality Control

- 5.4.1. All appropriate phases of the monitoring, sampling, and laboratory analytical procedures shall comply with the EPA Region IX-specified protocols and references listed in Special Condition 3.1.2.
- 5.4.2. The qualifications of the on-site Principal Investigator in charge of the field monitoring operation at the dump site shall be submitted to EPA Region IX and the ASEPA for approval whenever a new Principal Investigator is retained. Notification of any change in this individual shall be submitted to EPA Region IX and ASEPA at least 7 days before the cruise is scheduled.

6. SPECIAL CONDITIONS - NOTICE TO REGULATORY AGENCIES

6.1. Notice of Sailing to the U.S. Coast Guard Liaison Office and the American Samoa Environmental Protection Agency

- 6.1.1. The waste transporter shall provide telephone notification of sailing to CGLO Pago Pago at 633-2299 and the ASEPA at 633-2304 during working hours (7:00 a.m. to 3:30 p.m.) no later than 24 hours before the estimated time of departure for the dump site defined in Special Condition 2.2. A record of contact with both agencies shall be reported with other information for each disposal trip.
- 6.1.2. The waste transporter shall immediately notify CGLO Pago Pago and the ASEPA upon any changes in the estimated time of departure greater than two hours.
- 6.1.3. Surveillance of activities at the dump site designated in Special Condition 2.2, may be accomplished by unannounced aerial overflights or observation from another vessel by EPA Region IX, ASEPA, USCG or American Samoa Department of Public Safety personnel; or a USCG ship rider and/or a ASEPA or EPA Region IX ship rider who will be on board the towing/conveyance vessel for the entire voyage. Within two hours after receipt of the initial notification the waste transporter will be advised whether or not a ship rider will be assigned to the waste transporter's disposal vessel.

6.1.4. The following information shall be provided to CGLO Pago Pago and the ASEPA in the notification of sailing defined above:

- 6.1.4.1. The time of departure,
- 6.1.4.2. Estimated time of arrival at the dump site,
- 6.1.4.3. Estimated time of departure from the dump site, and
- 6.1.4.4. Estimated time of return to port.

6.2. Reports and Correspondence

6.2.1. Two copies of all reports and related correspondence required by General Condition 1.10, Special Conditions 3.2, 3.3, 4.3, 4.5, 4.6, 4.7, 5.2, 5.3, 6.1, and all other materials, including applications shall be submitted to EPA Region IX at the following address:

Office of Pacific Insular Area Programs (CMD-5)
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, California 94105-3901
Telephone (415) 744-2170

6.2.2. One copy of all reports required by General Condition 1.10 and Special Conditions 4.5, 4.6, 4.7 and 6.1 sent to the U.S. Coast Guard shall be submitted to the following address:

Commanding Officer
U.S. Coast Guard Liaison Office
P.O. Box 249
Pago Pago, American Samoa 96799
Telephone (684) 633-2299

- 6.2.3. One copy of all reports required by General Condition 1.10 and Special Conditions 3.2, 3.3, 4.3, 4.5, 4.6, 4.7, 5.2, 5.3, and 6.1 sent to the American Samoa Environmental Protection Agency shall be submitted to the following address:

Director
American Samoa Environmental Protection Agency
Office of the Governor
Pago Pago, American Samoa 96799
Telephone (684) 633-2304

- 6.2.4. One copy of the all reports required by Special Conditions 3.3, 5.2 and 5.3 shall be sent to the USFWS, the NMFS and the WPRFMC at the following addresses:

Project Leader
Office of Environmental Services
U.S. Fish and Wildlife Service
300 Ala Moana Boulevard
P.O. Box 50167
Honolulu, Hawaii 96850

Western Pacific Program Officer
National Marine Fisheries Service
2570 Dole Street
Honolulu, Hawaii 96822-2396

Executive Director
Western Pacific Regional Fishery Management Council
1164 Bishop Street, Suite 1405
Honolulu, Hawaii 96813

Signed this _____ day of _____, 1998

For the Regional Administrator:

Alexis Strauss, Acting Director
Water Division
U.S. EPA, Region IX

APPENDIX A

SPECIAL OCEAN DUMPING PERMIT OD 98-01 OCEAN DUMP SITE MONITORING PLAN

7. MONITORING OF RECEIVING WATER

Monitoring of the receiving waters at the disposal site defined in Special Condition 2.2 shall be the responsibility of the permittee. The required site monitoring may be accomplished jointly through an agreement between permittee and other permittees authorized to use the disposal site. Any such agreements negotiated between the permittee and other authorized permittees shall be the sole responsibility of the permittee named in this permit. EPA Region IX requires that a monitoring program be developed that complies with the special conditions defined below.

During each monitoring cruise, the disposal plume from the disposal vessel shall be sampled by taking discrete water samples for the measurement of parameters listed in Special Condition 7.2.4.

7.1. Location of Water Sampling Stations

7.1.1. On each sampling cruise, the latitude and longitude of all sampling stations shall be determined and plotted using an acceptable navigational system.

7.1.2. The Principal Investigator shall ensure that discrete water samples are taken at the locations marked in Figure 1.

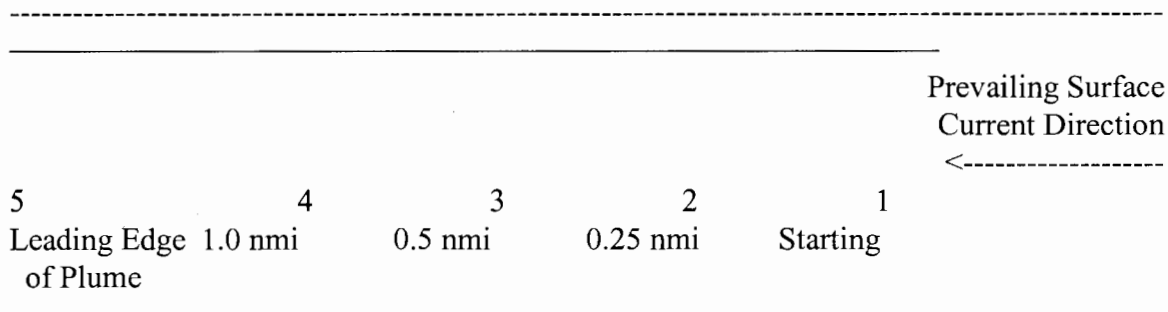


Figure 1. Orientation of Sample Stations (Top View) in the Middle of the Discharge Plume Visually Identified at the Time of Sampling.

7.1.3. The following stations, defined in Figure 1, shall be sampled on each sampling cruise:

7.1.4.1. Station 1 shall be the starting point of the dumping operation as determined in Special Condition 4.3.

7.1.4.2. Station 2 shall be 0.25 nautical miles (nmi) down-current from Station 1.

7.1.4.3. Station 3 shall be 0.5 nmi down-current from Station 1.

7.1.4.4. Station 4 shall be 1.0 nmi down-current from Station 1.

7.1.4.5. Station 5 shall be at the leading edge of the discharge plume, but within the plume.

7.1.4. The Principal Investigator shall ensure that each sampling station is positioned as close as possible to the middle of the discharge plume according to his/her best professional judgment.

7.2. **Water Column Characteristics to Be Measured**

7.2.1. Discrete water samples at Stations 1, 2, 3, 4, and 5 shall be taken at depths of 1, 3, and 10 meters from the surface at the middle of the plume visually identified by the Principal Investigator.

7.2.2. Surface water conditions shall be recorded at all stations including:

7.2.2.1. Wind speed and direction;

7.2.2.2. Current direction and wave height; and

7.2.2.3. Observations of plume color (e.g., Forel-Ule color scale), odor, floating materials, grease, oil, scum, and foam.

7.2.3. Water samples shall be obtained using a self-closing 3-liter water sample device at each depth listed in 7.2.1.

- 7.2.4. Water column parameters analyzed from discrete samples taken at the depths listed in 7.2.1 shall include:

Table 4. Physical and Chemical Parameters to be Analyzed from Water Samples Taken at the Ocean Disposal Site.

| Parameter^a | Method Detection Limit |
|---------------------------------|-----------------------------------|
| Total Suspended Solids | 10.0 mg/L |
| Total Volatile Suspended Solids | 10.0 mg/L |
| Oil and Grease | 10.0 mg/L |
| Total Phosphorus | 1.0 mg/L |
| Total Nitrogen | 1.0 mg/L |
| Ammonia | 1.0 mg/L |
| pH | 0.1 pH units |

a = Samples should be acidified to pH <2 with sulfuric acid and refrigerated at 4°C until analysis.

- 7.2.5. Temperature measurements shall be taken at depths of 1, 3, and 10 meters at the starting point of the disposal operation, as defined in Special Condition 4.3.3.

7.3. Frequency of Sampling

- 7.3.1. Water samples shall be collected in association with active dumping operations. Each station listed under Special Condition 7.1 shall be sampled once each month. These samples shall be used to characterize the receiving waters at the disposal site.
- 7.3.2. Control samples shall be taken at Station 1 before dumping activities.
- 7.3.3. Station 1 shall be sampled at a point within the plume immediately after discharge operations cease.
- 7.3.4. Stations 2 through 5 shall be sampled consecutively at distances indicated in Special Condition 7.1.4 to allow efficient sampling of the discharge plume. The time between each sample and the sampling location, beginning with the control

sample and ending with the sample collected at the leading edge of the plume, shall be recorded.

7.4. Water Quality Criteria and Standards

7.4.1. The Limiting Permissible Concentration (LPC) of the liquid phase of the fish processing wastes shall not be exceeded beyond the disposal site boundary within four hours after dumping or at any point in the marine environment after four hours. The LPC, as defined at 40 C.F.R. §227.27, shall not exceed applicable American Samoa Oceanic Water Quality Standards (see Table 1). EPA Region IX and the ASEPA will evaluate the LPC based on EPA's Ocean Dumping Regulations and the concentration of parameters measured at the stations sampled during the tenure of this permit.

8. MONITORING OF BIOLOGICAL COMMUNITIES

8.1. Pelagic Resources

8.1.1. All sightings of fish, sea turtles, sea birds, or cetaceans near the disposal site shall be recorded including:

- 8.1.1.1. Time, location and bearing;
- 8.1.1.2. Species name(s); and
- 8.1.1.3. Approximate number of individuals.

APPENDIX B - REPORT FORM 1

Monthly Volumes of StarKist Samoa Fish Processing Wastes Generated Per Day and Volumes of Fish Processing Waste Disposed at the Ocean Site

Volume Limit = 200,000 Gallons

Month _____ 19__

<< Conversion Note: For a Lotus spreadsheet (i.e.,
wk1), use 3-column format. >>

| Date | Total Volume Generated (gallons/day) | Volume Ocean Disposed (gallons/day) | Date | Total Volume Generated (gallons/day) | Volume Ocean Disposed (gallons/day) |
|----------|--|---|----------------|--|---|
| 1 | | | 17 | | |
| 2 | | | 18 | | |
| 3 | | | 19 | | |
| 4 | | | 20 | | |
| 5 | | | 21 | | |
| 6 | | | 22 | | |
| 7 | | | 23 | | |
| 8 | | | 24 | | |
| 9 | | | 25 | | |
| 10 | | | 26 | | |
| 11 | | | 27 | | |
| 12 | | | 28 | | |
| 13 | | | 29 | | |
| 14 | | | 30 | | |
| 15 | | | 31 | | |
| 16 | | | | | |
| SUBTOTAL | | | SUBTOTAL | | |
| | | | GRAND TOTAL | | |

NOTE: An asterisk (*) to the right of the date of fish processing waste volume signifies that a violation of the perm limit has occurred. Total number of violations this month = _____.

Monthly quantities of alum (aluminum sulfate) and coagulant polymer added to the fish processing waste streams:

Aluminum sulfate: _____ pounds/month
Coagulant polymer: _____ pounds/month

APPENDIX B - REPORT FORM 2

Data Form for 3-Month Report on Waste Stream Analyses for StarKist Samoa MPRSA § 102 Permit #OD 98-01

Reporting Period: From _____ 19__ To _____ 19__

StarKist Samoa - On-Shore Storage Tank Waste

<< Conversion Note: For a Lotus spreadsheet, use wkl format with layout below. >>

| Month & Year | Total Solids (mg/L) | Total Volatile Solids (mg/L) | 5-Day Biological Oxygen Demand (mg/L) | Oil and Grease (mg/L) | Total Phosphorus (mg/L) | Total Nitrogen (mg/L) | Ammonia (mg/L) | pH (pH units) | Density (g/mL) |
|------------------------|---------------------|------------------------------|---------------------------------------|-----------------------|-------------------------|-----------------------|----------------|---------------|----------------|
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| | | | | | | | | | |
| OD 98-01 Permit Limits | 101,800 | 84,100 | 129,390 | 62,940 | 1,750 | 10,980 | 11,810 | 6.2 to 7.1 | 0.97 to 1.03 |

Note an asterisk () next to the waste concentration signifies that a violation of the permit limit has occurred.

Cumulative Yearly Data on Fish Processing Wastes
Generated at StarKist Samoa's Plant and Disposed at the Ocean Site.
MPRSA §102 Special Permit #OD 98-01

Reporting Period:

From _____ **19**__
To _____ **19**__

<< Conversion Note: For a Lotus, use wk1 format with layout below. >>

| Month & Year | Total Generated (gallons/month) | Aluminum sulfate (pounds/month) | Coagulant polymer (pounds/month) | Volume Ocean Disposed (gallons/month) | Volume Ocean Disposed (gallons/month) |
|-------------------------------------|--|--|---|--|--|
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| | | | | | |
| Cumulative Yearly Totals | | | | | |

NOTE: A separate table shall be prepared for each calendar year.

C-3420

MARINE PROTECTION, RESEARCH AND SANCTUARIES ACT
OCEAN DUMPING PERMIT

PERMIT NUMBER AND TYPE: OD 90-02 Special

EFFECTIVE DATE: July 31, 1990

EXPIRATION DATE: July 30, 1993

PERMITTEE: VCS Samoa Packing Company, Inc.
P.O. Box 957
Pago Pago, American Samoa 96799

WASTE GENERATOR: VCS Samoa Packing Company, Inc.
P.O. Box 957
Pago Pago, American Samoa 96799

WASTE GENERATED AT: VCS Samoa Packing Company, Inc.
P.O. Box 957
Pago Pago, American Samoa 96799

PORT OF DEPARTURE: Pago Pago Harbor, American Samoa

WASTE TRANSPORTER: Pago Marine, Inc.
MV ASTRO
Pago Pago, American Samoa

A special ocean dumping permit is being issued to VCS Samoa Packing Company because the Regional Administrator of EPA Region 9 has determined that disposal of fish processing wastes off American Samoa meets EPA's ocean dumping criteria at 40 C.F.R. Parts 227 and 228. This special permit authorizes the transportation and dumping into ocean waters of fish processing wastes as described in the special conditions section pursuant to the Marine Protection, Research, and Sanctuaries Act (MPRSA) of 1972 (33 U.S.C. § 1401 et seq.) as amended (hereinafter referred to as "the Act"); regulations issued thereunder; and the terms and conditions set forth below.

This MPRSA Special Permit does not contain any information collection requirements subject to Office of Management and Budget review under the Paper Work Reduction Act of 1980, 44 U.S.C. § 3501 et seq. This determination has been made because the permit does not require data collection by more than 10 persons.

1. GENERAL CONDITIONS

1.1. Operation under this special ocean dumping permit shall conform to all applicable federal statutes and regulations including, but not limited to, the Act, the Ocean Dumping Ban Act of 1988 (PL 100-688), the Marine Plastic Pollution Research and Control Act of 1987 (PL 100-220), the Clean Water Act (33 U.S.C. § 1251 et seq.), and the Ports and Waterways Safety Act (33 U.S.C. § 1221 et seq.)

1.2. All transportation and dumping authorized herein shall be undertaken in a manner consistent with the terms and conditions of this permit. VCS Samoa Packing Company (hereafter referred to as "the permittee") shall be liable for compliance with all such terms and conditions. The permittee shall be held liable under § 105 of the Act (33 U.S.C. § 1415) in the event of any violation of the permit. During disposal operations when the permittee's wastes are combined with similar wastes from other permittees authorized to use the ocean disposal site defined in Special Condition 2.2, all companies shall be held individually liable under § 105 of the Act (33 U.S.C. § 1415) in the event of any violation of the permit.

1.3. Under § 105 of the Act, any person who violates any provision of the Act, 40 C.F.R. Parts 220 through 228 promulgated thereunder, or any term or condition of this permit shall be liable for a civil penalty of not more than \$50,000 per day for each violation. Additionally, any knowing violation of the Act, 40 C.F.R. Parts 220 through 228, or the permit may result in a criminal action being brought with penalties of not more than \$50,000 or one year in prison, or both. Violations of the Act or the terms and conditions of this permit include but are not limited to:

1.3.1. Transportation to, and dumping at any location other than that defined in Special Condition 2.2 of this permit;

1.3.2. Transportation and dumping of any material not identified in this permit, more frequently than authorized in this permit, or in excess of those quantities identified in this permit, unless specifically authorized by a written modification hereto;

1.3.3. Failure to conduct permit monitoring as required in Special Conditions 3.1, 3.3.1, 4.7 and 5.1; or

1.3.4. Failure to file waste stream and disposal site monitoring reports as required in Special Conditions 3.3, 4.7, 5.2 and 5.3.

1.4. Nothing contained herein shall be deemed to authorize, in any way, the transportation from the United States for the purpose of dumping into the ocean waters, the territorial sea, or the contiguous zone, the following materials:

- 1.4.1. High-level radioactive wastes;
 - 1.4.2. Materials, in whatever form, produced for radiological, chemical, or biological warfare;
 - 1.4.3. Persistent synthetic or natural materials which may float or remain in suspension in the ocean; or
 - 1.4.4. Medical wastes as defined in § 3(k) of the Act.
 - 1.4.5. Flotables, garbage, domestic trash, waste chemicals, solid waste, or any materials prohibited by the Ocean Dumping Ban Act or the Marine Plastic Pollution Research and Control Act.
- 1.5. Nothing contained herein shall be deemed to authorize, in any way, violation of applicable American Samoa Water Quality Standards.
- 1.6. After notice and opportunity for a hearing, this permit may be revised, revoked or limited, in whole or in part, subject only to the provisions of 40 C.F.R. §§ 222.3(b) through 222.3(h) and 40 C.F.R. § 223.2, as a result of a determination by the Regional Administrator of EPA that:
- 1.6.1. The cumulative impact of the permittee's dumping activities or the aggregate impact of all dumping activities in the dump site designated in Special Condition 2.2 should be categorized as Impact Category I, as defined in 40 C.F.R. § 228.10(c)(1);
 - 1.6.2. There has been a change in circumstances relating to the management of the disposal site designated in Special Condition 2.2;
 - 1.6.3. The dumping authorized by the permit would violate applicable American Samoa Water Quality Standards;
 - 1.6.4. The dumping authorized can no longer be carried out consistent with the criteria set forth in 40 C.F.R. Parts 227 and 228;
 - 1.6.5. The permittee violated any term or condition of the permit;
 - 1.6.6. The permittee misrepresented, or failed to accurately disclose all relevant facts in the permit application; or
 - 1.6.7. The permittee failed to keep records, engage in monitoring and reporting activities, or to notify appropriate officials in a timely manner of the transportation and dumping activities as specified in any condition of this permit.

1.7. The permittee shall ensure at all times that facilities, including any vessels associated with the permit, are in good working order to achieve compliance with the terms and conditions of this permit. During all transportation and loading operations, there shall not be a loss of fish processing wastes to any waterway or during transport to the disposal site.

1.8. Any change in the designated waste transporter may be made at the discretion of the Regional Administrator or his delegate, provided that a written request for such a transfer be made by the permittee at least thirty (30) days prior to the requested transfer date.

1.9. The permittee shall allow the Regional Administrator of EPA Region 9, the Commander of the Fourteenth U.S. Coast Guard District (USCG), the Director of the American Samoa Environmental Protection Agency (ASEPA), and/or their authorized representatives:

1.9.1. To enter into, upon, or through the permittee's premises, vessels, or other premises or vessels under the control of the permittee, where, or in which, a source of material to be dumped is located or in which any records are required to be kept under the terms and conditions of this permit or the Act;

1.9.2. To have access to and copy any records required to be kept under the terms and conditions of this permit or the Act;

1.9.3. To inspect any dumping equipment, navigational equipment, monitoring equipment or monitoring methods required in this permit;

1.9.4. To sample or require that a sample be drawn, under EPA, USCG, or ASEPA supervision, of any materials discharged or to be discharged; or

1.9.5. To inspect laboratory facilities, data, and quality control records required for compliance with any condition of this permit.

1.10. Material which is regulated by this permit may be disposed of, due to an emergency, to safeguard life at sea in locations or in a manner that does not comply with the terms of this permit. If this occurs, the permittee shall make a full report, in accordance with the provisions of 18 U.S.C. § 1001, within 15 days to the EPA Regional Administrator, the USCG and the ASEPA describing the conditions of this emergency and the actions taken, including the nature and amount of material disposed.

1.11. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property

or any invasion of rights, nor any infringement of Federal, State or local laws or regulations, nor does it obviate the necessity of obtaining State or local assent required by applicable law for the activity authorized.

1.12. This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities, or, except as authorized by this permit, the undertaking of any work in any navigable waters.

1.13. Unless otherwise provided for herein, all terms used in this permit shall have the meanings assigned to them by the Act or 40 C.F.R. Parts 220 through 228, issued thereunder.

2. SPECIAL CONDITIONS - DISPOSAL SITE AND WASTE CHARACTERIZATION

These conditions are required to define the length of the permit period, identify the disposal site location, describe the waste materials and define maximum permitted limits for each waste material.

2.1. Location of the Waste Generator and Duration of the Permit

2.1.1. The material to be dumped shall consist of fish processing wastes, defined in Special Conditions 2.3 and 2.4, which are materials generated at the permittee's fish cannery in Pago Pago, American Samoa.

2.1.2. This permit shall become effective on July 31, 1990 and it shall expire three years from the effective date at midnight on July 30, 1993.

2.2. Location of Disposal Site

Disposal of fish processing wastes generated at the location defined in Special Condition 2.1.1 shall be confined to a circular area with a 1.5 nautical mile radius, centered at 14° 24.00' South latitude by 170° 38.30' West longitude.

2.3. Description of Fish Processing Wastes

2.3.1. During the term of this permit, and in accordance with all other terms and conditions of this permit, the permittee is authorized to transport for disposal into ocean waters quantities of fish processing wastes that shall not exceed the following amounts:

| Fish Processing Wastes | Amount |
|--------------------------------------|---------------------|
| Dissolved Air Flotation (DAF) Sludge | 60,000 gallons/day |
| Precooker Water | 100,000 gallons/day |
| Press Water | 40,000 gallons/day |
| Total Maximum Daily Volume | 200,000 gallons/day |

2.4. Waste Material Limitations

2.4.1. Permitted Physical and Chemical Constituents

| Fish Processing Waste | Total Permitted Daily Volume To Be Dumped | Permitted Maximum Concentration Per Constituent ^a |
|------------------------------|---|--|
| DAF Sludge ^b | 60,000 gal/day | Total Solids |
| | | 492,000 mg/L |
| | | BOD ₅ |
| | | 443,840 mg/L |
| | | Total Phosphorus |
| | | 3,910 mg/L |
| | | Total Nitrogen |
| | | 14,950 mg/L |
| Precooker Water ^b | 100,000 gal/day | Oil and Grease |
| | | 282,750 mg/L |
| | | Tot. Vol. Solids |
| | | 308,700 mg/L |
| | | Density ^c |
| | | 0.85 to 1.08 g/ml |
| | | Ammonia |
| | | 2,570 mg/L |
| Press Water ^b | 40,000 gal/day | Total Solids |
| | | 257,290 mg/L |
| | | BOD ₅ |
| | | 60,220 mg/L |
| | | Total Phosphorus |
| | | 2,170 mg/L |
| | | Total Nitrogen |
| | | 20,820 mg/L |
| | | Oil and Grease |
| | | 207,830 mg/L |
| | | Tot. Vol. Solids |
| | | 358,180 mg/L |
| | | Density ^c |
| | | 0.96 to 1.04 g/ml |
| | | Ammonia |
| | | 2,740 mg/L |
| | | Total Solids |
| | | 463,780 mg/L |
| | | BOD ₅ |
| | | 524,270 mg/L |
| | | Total Phosphorus |
| | | 6,860 mg/L |
| | | Total Nitrogen |
| | | 32,020 mg/L |
| | | Oil and Grease |
| | | 386,480 mg/L |
| | | Tot. Vol. Solids |
| | | 384,560 mg/L |
| | | Density ^c |
| | | 0.98 to 1.07 g/ml |
| | | Ammonia |
| | | 4,940 mg/L |

a = All calculated values were rounded to the nearest 10, except the density range.

b = Gamma = 0.95, P = 0.95 (see Special Condition 2.4.2)

c = Density ranges were calculated based on two standard deviations from the average of research permit data adjusted for outliers.

2.4.2. Permitted Maximum Concentrations for each type of waste were calculated based on an analysis of historical data from the permittee's previous research permits. The calculations followed EPA's recommended procedure for determining permit limits as defined in the EPA document titled "Guidance Document for Ocean Dumping Permit Writers" (January 30, 1988). EPA Region 9 will periodically review these limits during the permit to evaluate the accuracy of the limits. If revisions are necessary, EPA Region 9 will make changes according to the authority defined in the Ocean Dumping Regulations at 40 C.F.R §§ 223.2 to 223.5.

2.4.3. The pH range for all fish processing wastes shall not be less than 5.5 pH units nor greater than 7.0 pH units.

2.4.4. The Permitted Maximum Concentration and pH limits, listed above, shall not be exceeded at any time during the term of this permit.

3. SPECIAL CONDITIONS - ANALYSIS OF WASTE MATERIAL

Compliance with the permitted maximum concentrations defined in Special Condition 2.4 shall be determined by monthly monitoring of each of the waste streams permitted for ocean disposal. Additional analyses of fish processing wastes and reporting requirements are defined in this section. Any sampling dates shall be scheduled within the first two weeks of the month to allow enough time for laboratory analyses and report writing to comply with Special Condition 3.3.

3.1. Analyses of Waste Material

3.1.1. Concentrations of the constituents listed in Special Condition 2.4 and those listed in the table below shall be determined for each waste stream. A sample of each waste stream shall be taken before the individual streams are mixed prior to being pumped into the disposal vessel. A sample shall consist of three replicate samples, taken on the day that sampling is scheduled, which are pooled to be used as a composite sample. The detection limits specified in the table shall be used in all waste stream analyses.

| Parameters | Detection Limits |
|---------------------------|------------------|
| Total Solids ^a | 10.0 mg/L |
| BOD ₅ | 10.0 mg/L |
| Total Phosphorus | 1.0 mg/L |
| Total Nitrogen | 1.0 mg/L |
| Oil and Grease | 10.0 mg/L |
| pH | 0.1 pH units |
| Total Volatile Solids | 10.0 mg/L |

| Parameters (cont.) | Detection Limits |
|---|------------------|
| Density | 0.01 g/mL |
| Ammonia | 1.0 mg/L |
| Aluminum | 0.01 mg/L |
| Chromium | 0.01 mg/L |
| Nickel | 0.01 mg/L |
| Copper | 0.01 mg/L |
| Lead | 0.01 mg/L |
| Cadmium | 0.01 mg/L |
| Mercury | 0.01 mg/L |
| Total Petroleum Hydrocarbons ^b | 0.05 mg/L |

a = Limits for Total Solids will be calculated when enough data are available.

b = Infrared Spectrophotometry, EPA Method 418.1

3.1.2. All waste material sampling procedures, analytical protocols, and quality control/quality assurance procedures shall be performed in accordance with guidelines specified by EPA Region 9. The following references shall be used by the permittee:

3.1.2.1. 40 C.F.R. Part 136, EPA Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act;

3.1.2.2. Tetra Tech, Incorporated 1985. Summary of U.S. EPA-approved Methods, Standard Methods and Other Guidance for 301(h) Monitoring Variables. Final program document prepared for the Marine Operations Division, Office of Marine and Estuarine Protection, U.S. Environmental Protection Agency. EPA Contract No. 68-01-693. Tetra Tech, Incorporated, Bellevue, Wa.; and

3.1.2.3. Environmental Protection Agency. 1987. Quality Assurance and Quality Control for 301(h) Monitoring Programs: Guidance on Field and Laboratory Methods. Office of Marine and Estuarine Protection, Washington, D.C. EPA 430/9-86-004.

3.1.3. Any waste material constituents listed in Special Condition 3.1.1 that are shown to be consistently nondetectable, may be eliminated from further analytical tests. Before elimination of the parameter is permitted, the permittee shall obtain written approval from EPA Region 9 and the ASEPA.

3.2. Analytical Laboratory

3.2.1. Within 30 days of the effective date of this permit, the name and address of the contract laboratory or laboratories and a description of all analytical test procedures and quality assurance/quality control procedures, including detection limits being used, shall be provided for EPA Region 9 approval.

3.2.2. Any potential variation or change in the designated laboratory or analytical procedures shall be reported, in writing, for EPA Region 9 approval.

3.2.3. EPA Region 9 may require analyses of quality control samples by any laboratories employed for purposes of compliance with Special Condition 3.1 and Appendix A. Upon request, the permittee shall provide EPA Region 9 with the analytical results from such samples.

3.2.4. A complete analysis of constituents, required in Special Condition 3.1, shall be made by the permittee and reported to EPA Region 9 and the ASEPA whenever there is a change in the quality of the waste, process configuration, or waste treatment. If deemed necessary by EPA Region 9, bioassays shall be required in addition to constituent analyses.

3.3. Reporting

3.3.1. The permittee shall provide EPA Region 9, ASEPA, the National Marine Fisheries Service (NMFS), the U.S. Fish and Wildlife Service (USFWS) and the Western Pacific Regional Fishery Management Council (WPRFMC) with a report, prepared every 6 months during the permit period, that contains the following information:

3.3.1.1. Daily volumes of DAF sludge, press water and precooker water removed from the permittee's facility, and loaded into the disposal vessel reported in gallons per day and tons per day;

3.3.1.2. Monthly waste stream analyses demonstrating that the waste materials being dumped comply with the permitted limits of constituents listed in Special Condition 2.4;

3.3.1.3. Monthly analyses of the additional parameters listed in Special Condition 3.1; and

3.3.1.4. The monthly amount of coagulant polymer and alum added to the waste streams reported in pounds.

3.3.2. Such reports, including a statistical analysis of parameter variability and comparison with the permit limits, shall be submitted to EPA Region 9, ASEPA, NMFS, USFWS and WPRFMC within 45 days of the end of the preceding 6-month period for which they were prepared. The reports shall be submitted within this time unless extenuating circumstances are communicated to EPA Region 9 and the ASEPA in writing.

3.3.3. A summary report of all 6-month reports listed in Special Condition 3.3.1, including a statistical analyses of parameter variability, comparisons with permit limits and a detailed discussion of the summary results, shall be submitted by the permittee to EPA Region 9 and the ASEPA 45 days after the permit expires.

3.3.4. Upon detection of a violation of any permit condition, the permittee shall send a written notification of this violation to EPA Region 9 and the ASEPA within five working days and a detailed written report of the violation shall be sent to the agencies within 15 working days. This notification shall pertain to any permit limits, defined in Special Condition 2.4, that are exceeded; and any disposal operation that occurs outside the disposal site defined in Special Condition 2.2.

3.3.5. One year from the effective date of this special permit, the permittee shall submit a report to EPA Region 9 and ASEPA on the concentrations of heavy metals and petroleum hydrocarbons that have been measured in each of the waste streams since 1986. This report shall contain the following information:

3.3.5.1. All data obtained from waste stream analyses measured at the permittee's plant, including means, standard deviations and statistical analyses;

3.3.5.2. Evaluation of the accuracy and precision of the data provided by the permittee's contractor, including quality assurance/quality control data, and measures necessary to improve the accuracy and precision of data reported to EPA Region 9 and ASEPA;

3.3.5.3. Engineering analysis of the source of these heavy metals and petroleum hydrocarbons;

3.3.5.4. Proposed methods or requirements for reducing concentrations of these heavy metals and petroleum hydrocarbons in the waste streams by factors of 10%, 50% and 95%. These proposals should include plant engineering and economic analyses for each level of reduction.

3.3.5.5. EPA Region 9 and ASEPA will evaluate the report to determine possible requirements for plant modification, waste stream treatment or other special conditions to eliminate the concentrations of heavy metals and petroleum hydrocarbons in the permittee's waste streams.

3.3.6. One year from the effective date of this special permit, the permittee shall submit a report to EPA Region 9 and ASEPA on the accuracy and precision of all data reported from 1980 to the present for waste stream flows and analyses of the waste streams, including DAF sludge, press water and precooker water. These data shall include test results for total solids, 5-day biological oxygen demand, total phosphorus, total nitrogen, oil and grease, pH, total volatile solids, density and ammonia, not heavy metals or petroleum hydrocarbon concentrations. This report shall contain the following information:

3.3.6.1. All data obtained from waste stream analyses measured at the permittee's plant, including means, standard deviations, regression analysis and time-series analysis;

3.3.6.2. Evaluation of the accuracy and precision of the data provided by the permittee's contractor, evaluation of all laboratory quality assurance/quality control reports, and measures necessary to improve the accuracy and precision of the data reported to EPA Region 9 and ASEPA; and

3.3.6.3. EPA Region 9 and ASEPA will evaluate the report to determine possible requirements to improve sample or data analyses for the permittee's waste streams.

4. SPECIAL CONDITIONS - VESSEL OPERATIONS

Specifications for vessel operations are required to limit dumping activities to the dump site identified in Special Condition 2.2 and to record all dumping activities.

Fish processing wastes from the permittee's waste streams and those of other authorized permittees may be loaded into the disposal vessel together. If the waste transported to the disposal site is a combination of materials from the two plants, then the companies shall each be liable for all permit conditions regarding disposal of the wastes. If the wastes disposed at the site are only fish processing wastes generated at the permittee's plant, then the permittee shall be solely liable for all permit conditions pertaining to the disposal operation. The volume of material loaded into the disposal vessel by the permittee shall be reported as specified in Special Condition 4.7.2.3.

4.1. Posting of the Permit

This permit, or a true copy thereof, shall be placed in a conspicuous place on any vessel which will be used for the transportation and dumping authorized by this permit. If the dumping vessel is an unmanned barge, the permit or true copy of the permit shall be transferred to the towing vessel.

4.2. Vessel Identification

Every vessel engaged in the transportation of wastes for ocean disposal shall have its name and number painted in letters and numbers at least fourteen (14) inches high on both sides of the vessel. The name and number shall be kept distinctly legible always, and a vessel without such markings shall not be used to transport or dump waste material.

4.3. Determination of the Disposal Location Within the Dump Site

On each disposal trip, the master of the disposal vessel shall determine the location of the disposal operation as follows:

4.3.1. The disposal vessel, as defined under WASTE TRANSPORTER on page 1 of this permit, shall proceed directly to the center of the disposal site at the location specified in Special Condition 2.2.

4.3.2. The master of the vessel shall observe the conditions at the dump site center, noting the vessel's position (latitude and longitude), wind direction and observed surface current direction.

4.3.3. After the conditions defined in Special Condition 4.3.2 have been recorded, the master of the disposal vessel shall proceed 1.1 nautical miles up current from the center of the disposal site and record the position of the disposal vessel (latitude and longitude). This position shall be the starting point for the disposal operation for the trip.

4.3.4. This procedure shall be repeated for each disposal trip.

4.3.5. The master of the disposal vessel shall prepare a navigational plot of the procedures defined in Special Conditions 4.3.1 to 4.3.3 and supply these to the permittee. The permittee shall submit these plots in the 6-month reports required under Special Condition 3.3.1. The navigational plot shall include:

4.3.5.1. The disposal vessel's course during the entire dumping operation; and

4.3.5.2. The times and location of entry and exit from the disposal site, position and time of arrival at the center of the disposal site, position and time of arrival at the location 1.1 nautical miles up current from the center of the disposal site, beginning and ending of dumping, and disposal vessel position plotted every 15 minutes while dumping.

4.3.6. The master of the disposal vessel shall sign and date each plot.

4.3.7. The master of the disposal vessel shall certify that disposal occurred in the manner required by the permit.

4.4. Disposal Rate and Vessel Speed

4.4.1. The disposal vessel/barge shall discharge the material authorized by this permit beginning at the disposal location as determined by Special Condition 4.3.3. Disposal shall only be authorized within the dump site boundaries on a line 1.0 nautical miles on either side of the starting point determined in Special Condition 4.3.3. The entire disposal vessel track shall be 2.0 nautical miles. The vessel track shall be in a direction that is perpendicular to the current detected at the center of the disposal site as defined in Special Condition 2.2.

4.4.1.1. From June 1 through November 30, the disposal operation at the location plotted in Special Condition 4.3.3. shall be conducted at a rate of 140 gallons per minute per knot, not to exceed 1,400 gallons per minute at a maximum speed of 10 knots.

4.4.1.2. From December 1 through May 31, the disposal operation at the location plotted in Special Condition 4.3.3. shall be conducted at a rate of 120 gallons per minute per knot, not to exceed 1,200 gallons per minute at a maximum speed of 10 knots.

4.5. Navigational Equipment

The permittee shall employ an onboard electronic positioning system (see reference below) to fix the position of the disposal vessel accurately during all dumping operations. This system is subject to advance approval by EPA Region 9 and the U.S. Coast Guard Liaison Office (CGLO), Pago Pago 15 days after the effective date of the permit.

The following reference should be used in evaluating the electronic positioning system:

Environmental Protection Agency. 1987. Evaluation of Survey Positioning Methods for Nearshore Marine and Estuarine Waters. Office of Marine and Estuarine Protection, Washington, D.C. EPA 430/9-86-003.

4.6. Permitted Times for Disposal Operations

Dumping operations shall be restricted to daylight hours, unless an emergency exists and written authorization is obtained from the CGLO Pago Pago or the ASEPA prior to departure. EPA Region 9 shall be notified no later than 15 working days after the emergency in a written report of the situation.

4.7. Reporting of the Ocean Dumping Vessel Operations

4.7.1. The waste transporter shall maintain and the permittee shall submit copies of a monthly transportation and dumping logbook, including plots of all information requested in Special Condition 4.7.2, to EPA Region 9, CGLO Pago Pago, and the ASEPA as part of the 6-month report.

4.7.2. The logbook shall contain the following information for each waste disposal trip:

4.7.2.1. Permit number, date and serial trip number;

4.7.2.2. The time that loading of the vessel commences and ceases in Pago Pago Harbor;

4.7.2.3. The volume of each waste loaded into the disposal vessel from each fish cannery;

4.7.2.4. The time and navigational position that dumping commences and ceases;

4.7.2.5. A record of vessel speed and direction every 15 minutes during each dumping operation at the disposal site, and a plot on a navigational chart of the vessel's course defined in Special Condition 4.3.5;

4.7.2.6. Observe, note and plot the time and position of any flutable material;

4.7.2.7. Observe, note and plot the wind speed and direction every 30 minutes while dumping wastes at the designated disposal site;

4.7.2.8. Observe and note current direction at the beginning and end of the disposal trip, and the direction of the waste plume at the end of the disposal operation;

4.7.2.9. Observe, note and plot the presence of the previous disposal plume and any unusual occurrences during the disposal trip, or any other information relevant to the assessment of environmental impacts as a result of dumping activities; and

4.7.2.10. Any unusual occurrences noted under Special Condition 4.7.2.9 shall be highlighted in the report defined in Special Condition 3.3.1.

5. SPECIAL CONDITIONS - DUMP SITE MONITORING

The monitoring program for disposal of wastes in the ocean must document effects of disposed wastes on the receiving waters, biota, and beneficial uses of the receiving waters; compliance with EPA's Ocean Dumping Regulations; and determine compliance with permit terms and conditions. Revisions to the monitoring program may be made under the direction of EPA Region 9 at any time during the permit term, in compliance with 40 C.F.R. §§ 223.2 and 223.3. This may include a reduction or increase in the number or parameters to be monitored, the frequency of monitoring, the location of sample stations, or the number and size of samples to be collected.

Implementation of the disposal site monitoring program and all segments of the monitoring program specified in Special Condition 5 and Appendix A shall be the responsibility of the permittee.

5.1. Monitoring Program

The permittee is required to conduct the monitoring program specified by EPA Region 9, defined in Appendix A, as a means of determining the environmental impacts of ocean dumping of the waste. If possible, monitoring cruises shall be scheduled within the first two weeks of each month to allow enough time for laboratory analysis and report writing in compliance with Special Condition 5.2. The permittee shall notify the ASEPA at least 48 hours before any scheduled monitoring activities.

5.2. Monitoring Reports

Monthly site monitoring reports shall be submitted to EPA Region 9, the ASEPA, NMFS, USFWS and WPRFMC with the 6-month reports as specified in Special Condition 3.3.2. The reports shall include: neatly compiled raw data for all sample analyses, quality assurance/quality control data, statistical analysis of sample variability between stations and within samples for each parameter, and a detailed discussion of the results.

5.3. Final Summary Report

5.3.1. A report shall be submitted to EPA Region 9, ASEPA, NMFS, USFWS and WPRFMC 60 days after the permit expires. This report shall summarize all of the data collected during the waste material and dump site monitoring programs specified in this special permit.

5.3.2. At a minimum, the summary report shall contain the following sections:

5.3.2.1. Introduction (including a summary of previous ocean disposal activities),

5.3.2.2. Location of Study Sites,

5.3.2.3. Materials and Methods,

5.3.2.4. Results and Discussion (including comparisons and contrasts with previous data related to disposal of fish processing wastes off American Samoa),

5.3.2.5. Conclusions, and

5.3.2.6. References.

5.4. Quality Assurance/Quality Control

5.4.1. All appropriate phases of the monitoring, sampling, and laboratory analytical procedures shall comply with the EPA Region 9-specified protocols and references listed in Special Condition 3.1.2.

5.4.2. The qualifications of the on-site Principal Investigator in charge of the field monitoring operation at the dump site shall be submitted to EPA Region 9 and the ASEPA for approval before the initial monitoring cruise. Notification of any change in this individual shall be submitted to EPA Region 9 and ASEPA at least 7 days before the cruise is scheduled.

6. SPECIAL CONDITIONS - NOTICE TO REGULATORY AGENCIES

6.1. Notice of Sailing to U.S. Coast Guard

6.1.1. The waste transporter shall provide telephone notification of sailing to CGLO Pago Pago at 633-2299 and the ASEPA at 633-2304 during working hours (7:00 a.m. to 3:30 p.m.) no later than 24 hours prior to the estimated time of departure for the dump site defined in Special Condition 2.2.

6.1.2. The waste transporter shall immediately notify CGLO Pago Pago and the ASEPA upon any changes in the estimated time of departure greater than two hours.

6.1.3. Surveillance of activities at the dump site designated in Special Condition 2.2, may be accomplished by unannounced aerial overflights, a USCG shiprider and/or a ASEPA shiprider who will be on board the towing/conveyance vessel for the entire voyage. Within two hours after receipt of the initial notification the waste transporter will be advised whether or not a shiprider will be assigned to the waste transporter's disposal vessel.

6.1.4. The following information shall be provided to CGLO Pago Pago or the ASEPA in the notification of sailing defined above:

6.1.4.1. The time of departure,

6.1.4.2. Estimated time of arrival at the dump site,

6.1.4.3. Estimated time of departure from the dump site, and

6.1.4.4. Estimated time of return to port.

6.2. Reports and Correspondence

6.2.1. Two copies of all reports and related correspondence required by General Condition 1.9, Special Conditions 3.2, 3.3, 4.7, 5.2, 5.3, 5.4, and all other materials, including applications shall be submitted to EPA Region 9 at the following address:

Office of Pacific Island and Native American Programs
(E-4)
U.S. Environmental Protection Agency, Region 9
1235 Mission Street
San Francisco, California 94103
Telephone (415) 556-5069

See new
address in memo
of 9/7/90

6.2.2. Two copies of all reports required by General Condition 1.9 and Special Conditions 4.7 and 6.1 sent to the U.S. Coast Guard shall be submitted to the following address:

Commanding Officer
U.S. Coast Guard Liaison Office
P.O. Box 249
Pago Pago, American Samoa 96799
Telephone (684) 633-2299

6.2.3. Three copies of all reports required by General Condition 1.9 and Special Conditions 3.2, 3.3, 4.7, 5.2, 5.3, 5.4 and 6.1 sent to the American Samoa Environmental Protection Agency shall be submitted to the following address:

Director
American Samoa Environmental Protection Agency
Office of the Governor
Pago Pago, American Samoa 96799
Telephone (684) 633-2304

6.2.4. One copy of the all reports required by Special Conditions 3.3.2, 3.3.3, 5.2 and 5.3 shall be sent to the USFWS, the NMFS and the WPRFMC at the following addresses:

Project Leader
Office of Environmental Services
U.S. Fish and Wildlife Service
300 Ala Moana Boulevard
P.O. Box 50167
Honolulu, Hawaii 96850

Western Pacific Program Officer
National Marine Fisheries Service
2570 Dole Street
Honolulu, Hawaii 96822-2396

Executive Director
Western Pacific Regional Fishery Management Council
1164 Bishop Street, Suite 1405
Honolulu, Hawaii 96813

Signed this 16th day of July, 1990

For the Regional Administrator:

Keith Takai
Harry Seraydarian
for Director
Water Management Division
U.S. EPA, Region 9

APPENDIX A

SPECIAL OCEAN DUMPING PERMIT OD 90-01 OCEAN DUMP SITE MONITORING PLAN

7. MONITORING OF RECEIVING WATER

Monitoring of the receiving waters at the disposal site defined in Special Condition 2.2 shall be the responsibility of the permittee. Funding and cooperation for site monitoring may be accomplished through an agreement between permittee and other permittees authorized to use the disposal site. Any agreements negotiated between the permittee and other authorized permittees shall be the sole responsibility of the permittee named in this permit. EPA Region 9 requires that a monitoring program be developed that complies with the conditions defined below.

During each monitoring cruise, the waste plume from the disposal vessel shall be sampled by taking discrete water samples for the measurement of parameters listed in Special Condition 7.2.4. Results of the first 6-month monitoring report will be evaluated by EPA Region 9 to determine whether portions of Special Conditions 7 and/or 8 will be revised. The evaluation will be based on documented sampling results and recommendations by the permittee(s).

7.1. Location of Water Sampling Stations

7.1.1. On each sampling cruise, the latitude and longitude of all sampling stations shall be determined and plotted using appropriate navigational equipment.

7.1.2. The Principal Investigator shall ensure that discrete water samples are taken at the locations marked in Figure 1.

7.1.3. The Principal Investigator shall ensure that each sampling station is positioned as close as possible to the middle of the discharge plume according to his best professional judgment.

7.1.4. The following stations shall be sampled on each sampling cruise (see Figure 1):

7.1.4.1. Station 1 shall be the starting point of the dumping operation as determined in Special Condition 4.3.

7.1.4.2. Station 2 shall be 0.25 nautical miles (nm) down-current from Station 1.

7.1.4.3. Station 3 shall be 0.5 nm down-current from Station 1.

7.2.5. If waste stream analyses, described in Special Condition 3.1, identify significantly high levels of constituents that may adversely affect marine water quality, EPA Region 9 may require that those constituents be added to the list of water column parameters in 7.2.4 above.

7.2.6. Temperature measurements shall be taken at depths of 1, 3, and 10 meters at the starting point of the disposal operation, as defined in Special Condition 4.3.3.

7.3. Frequency of Sampling

7.3.1. Water samples shall be collected when dumping operations occur. Each station listed under Special Condition 7.1 shall be sampled once each month. These samples shall be used to characterize the receiving waters at the disposal site.

7.3.2. Control samples shall be taken at Station 1 prior to dumping activities.

7.3.3. Station 1 shall be sampled at a point within the plume immediately after discharge operations cease.

7.3.4. Stations 2 through 5 shall be sampled consecutively at distances indicated in Special Condition 7.1.4 to allow efficient sampling of the discharge plume. The time between each sample and the sampling location, beginning with the control sample and ending with the sample collected at the leading edge of the plume, shall be recorded.

7.4. Water Quality Criteria and Standards

7.4.1. The limited permissible concentration (LPC) of the liquid phase of the waste material shall not be exceeded at the disposal site boundary four hours after disposal operations cease. The LPC is that concentration of the material which, after allowance for initial mixing as defined at 40 C.F.R. § 227.29, does not exceed applicable American Samoa Oceanic Water Quality Standards. EPA Region 9 and the ASEPA will evaluate the LPC based on EPA's Ocean Dumping Regulations and the water quality values obtained for the stations sampled during the tenure of this permit.

7.4.2. The following standards apply to American Samoa oceanic water:

| Parameter | Median not to exceed given value |
|------------------------------|----------------------------------|
| Turbidity (NTU) | 0.20 |
| Total Phosphorus (ug-P/L) | 11.00 |

| Parameter (cont.) | Median not to exceed given value |
|-----------------------------------|---|
| Total Nitrogen (ug-N/L) | 115.00 |
| Chlorophyll <u>a</u> (ug/L) | 0.18 |
| Light Penetration Depth (feet) | 150* |
| Dissolved Oxygen (DO) | Not less than 80% of saturation or less than 5.5 mg/L. If the natural level of DO is less than 5.5 mg/L, then the natural DO shall become the standard. |
| pH | The range shall be 6.5 to 8.6 pH units and within 0.2 pH units of that which would occur naturally. |

*To exceed the given value 50% of the time.

8. MONITORING OF BIOLOGICAL COMMUNITIES

8.1. Pelagic Resources

8.1.1. All sightings of fish, sea turtles, sea birds, or cetaceans near the disposal site shall be recorded including:

- 8.1.1.1. Time, location and bearing;
- 8.1.1.2. Species name(s); and
- 8.1.1.3. Approximate number of individuals.